

57. (New) The recombinant nucleic acid molecule according to claim 56 wherein said recombinant nucleic acid molecule is present in an expression vector, said expression vector producing the chimeric polypeptide when expressed in a host cell.

58. (New) A host cell comprising the recombinant nucleic acid molecule according to claim 57 wherein said host cell produces the chimeric polypeptide.

59. (New) The host cell according to claim 58 wherein said host cell produces stable fimbriae comprising the chimeric polypeptide.

60. (New) The host cell according to claim 58 wherein said recombinant nucleic acid molecule encodes a chimeric polypeptide selected from the group consisting of SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, and SEQ ID NO:30.

61. (New) The host cell according to claim 58 wherein said recombinant nucleic acid molecule encodes a heterologous antigen as set forth in SEQ ID NO:10.

62. (New) The host cell according to claim 58 wherein said host cell further comprises a nucleic acid sequence that encodes at least one polypeptide as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8.

63. (New) The host cell according to claim 62 wherein said nucleic acid sequence that encodes at least one polypeptide as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 is recombinant.

64. (New) The host cell according to claim 63 wherein said at least one polypeptide as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 further comprises an amino acid sequence as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 in which at least one fimbrin polypeptide segment that is present in SEQ ID NO:6, SEQ ID NO:7, or SEQ

ID NO:8 is replaced with a heterologous polypeptide antigen segment that is equal in length to the fimbrin polypeptide segment.

65. (New) The host cell according to any one of claims 56-64 wherein said host cell is selected from the group consisting of a strain of *Enterobacteriaceae*, *Escherichia coli*, and *Salmonella*.

66. (New) The recombinant nucleic acid molecule according to claim 56 wherein said recombinant nucleic acid molecule is in the chromosome of a host cell.

67. (New) The recombinant nucleic acid molecule according to claim 66 wherein said host cell produces the chimeric polypeptide.

68. (New) The recombinant nucleic acid molecule according to claim 66 wherein said host cell produces stable fimbriae comprising the chimeric polypeptide.

69. (New) The recombinant nucleic acid molecule according to claim 66 wherein said recombinant nucleic acid molecule encodes a chimeric polypeptide selected from the group consisting of SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, and SEQ ID NO:30.

70. (New) The recombinant nucleic acid molecule according to claim 66 wherein said recombinant nucleic acid molecule encodes a heterologous antigen as set forth in SEQ ID NO:10.

71. (New) The recombinant nucleic acid molecule according to claim 66 wherein said host cell further comprises a nucleic acid sequence that encodes at least one fimbrin polypeptide as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8.

72. (New) The recombinant nucleic acid molecule according to claim 71 wherein said nucleic acid sequence that encodes at least one fimbrin polypeptide as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 is recombinant.

73. (New) The recombinant nucleic acid molecule according to claim 72 wherein said at least one fimbrin polypeptide as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 further comprises an amino acid sequence as set forth in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 in which at least one fimbrin polypeptide segment that is present in SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 is replaced with a heterologous polypeptide antigen segment that is equal in length to the fimbrin polypeptide segment.

74. (New) The recombinant nucleic acid molecule according to any one of claims 66-73 wherein said host cell is selected from the group consisting of a strain of *Enterobacteriaceae*, *Escherichia coli*, and *Salmonella*.

REMARKS

Reconsideration of the present application in view of the above amendments and following remarks is respectfully requested. As set forth above, Applicants have canceled claims 1-34, 41-44 and 48-53 without prejudice to the filing of any divisional, continuation, or, continuation-in-part application. Applicants hereby submit new claims 56-74. Support for new claims may be found in the subject application as originally filed, in part, at page 2, lines 13-23; and at page 10, line 10 through page 11, line 15 (*see, e.g.*, claims 56, 60-64, and 69-73); at page 18, lines 1-8 (*see, e.g.*, claims 58-65). No new matter has been added. Therefore, claims 56-74 are currently pending.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached section is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."